

In the Claims:

1. (canceled)

2. (currently amended) A control rod according to claim 13, ~~characterized in that~~
wherein the length of the upper part constitutes at most one-third of the length of the absorber blade.

3. (currently amended) A control rod according to claim 13, ~~characterized in that~~
wherein said inner part in at least some portion constitutes at least one-third of the width of the absorber blade.

4. (canceled)

5. (canceled)

6. (currently amended) A control rod according to claim 13, ~~characterized in that~~
wherein the absorber blades comprise a plurality of radially arranged channels in which the absorber material is arranged, whereby at least the majority of the channels in the upper part are shorter than the channels in the lower part of the absorber blades.

7. (currently amended) A control rod according to claim 6, ~~characterized in that~~ wherein
the channels in the upper part and the lower part have a diameter of essentially equal size.

8. (currently amended) A control rod according to claim 13, ~~characterized in that~~ wherein the absorber blades comprise a plurality of channels, arranged axially in relation to the control rod, in which the absorber material is arranged, whereby at least the majority of the channels are arranged radially outside one or more channels which are arranged nearest the cruciform center.

9. (currently amended) A control rod according to claim 8, ~~characterized in that~~ wherein the channels arranged nearest the cruciform center are shorter than the channels arranged in the outer part of the absorber blades, arranged radially outside said cruciform center.

10. (currently amended) A control rod according to claim 9, ~~characterized in that~~ wherein the channels arranged nearest the cruciform center and the channels arranged in the outer part of the absorber blades, arranged radially outside said cruciform center, have a diameter of essentially equal size.

11. (currently amended) A control rod according to claim 13, ~~characterized in that~~ wherein the absorber material consists of boron and/or hafnium.

12. (currently amended) A control rod according to claim 13, ~~characterized in that~~ wherein the absorber material consists of boron carbide and/or hafnium metal.

13. (previously presented) A control rod for a boiling water reactor, comprising:

four absorber blades forming an orthogonal cross with a cruciform centre, the absorber blades having a width in a radial direction of the control rod and a length in a longitudinal direction of the control rod, wherein each absorber blade comprises a neutron-absorber material distributed along its length, wherein the control rod comprises an upper part and lower part that comprise a whole length portion of the control rod that is provided with the neutron-absorber material, wherein a mean value of a quantity of absorber material per unit of length of the control rod is smaller in the upper part of the control rod than in the lower part, wherein the upper part of each absorber blade comprises an inner part and an outer part, wherein the inner part is arranged radially inside the outer part, wherein the outer part is provided with the neutron-absorber material whereas the inner part lacks neutron-absorber material, wherein the inner part, in at least some portion of the upper part, comprises at least one-fourth of the width of the absorber blade, wherein a first plurality of recesses are arranged in the absorber blade along the cruciform center of the control rod in the inner part of the upper part, wherein a second plurality of recesses are arranged in the absorber blade along the cruciform center of the control rod in the lower part of the control rod, the first and second plurality of recesses being made as through-holes through the absorber blade, wherein the recesses in the upper part are wider than at least a majority of the recesses in the lower part.

14. (previously amended) A control rod, comprising:

four absorber blades forming an orthogonal cross having a cruciform center and having an upper part, a lower part, an inner part proximal to the cruciform center, an outer part distal to the cruciform center, a width in a radial direction of the blade and a length in a longitudinal direction of the blade, wherein neutron absorbing material is arranged in the outer part of each blade and neutron absorbing material is not arranged in at least a portion of the inner upper part of each blade and wherein a mean quantity of absorber material per unit length of the control rod is less in the upper part than in the lower part; and

a plurality of first recesses arranged in the upper part of the blades and a plurality of second recesses arranged in the lower part of the blades, the first and second recesses operative to permit moderator access to the cruciform center to control burn up of fissile material along the length of the absorber blade, the first and second recesses comprising holes extending through the inner portion of the absorber blades and distributed along the absorber blades at the cruciform center, wherein the first recesses are wider than at least a majority of the second recesses.

15. (currently amended) A control rod, comprising:

four absorber blades forming an orthogonal cross having a cruciform center and having an upper part, a lower part, an inner part proximal to the cruciform center, an outer part distal to the cruciform center, a width in a radial direction of the blade and a length in a longitudinal direction of the blade, wherein neutron absorbing material is arranged in the outer part of each blade and neutron absorbing material is not arranged in at least a portion of the inner upper part of each blade and wherein a mean quantity of absorber material per unit length of the control rod is less in the upper part than in the lower part; and

a plurality of recesses arranged in the blades, the recesses being operative to permit moderator access to the cruciform center to control burn up of fissile material along the length of the absorber blade, the ~~first and second~~ plurality of recesses comprising holes extending through the inner portion of the absorber blades and distributed along the absorber blades at the cruciform center, wherein recesses arranged in the upper part of the blades are wider than at least a majority of recesses arranged in the lower part of the blades.